

Work Order ID 57029

March 17, 2010 1:12:23 PM



Page 1

Item ID: D119-696-043

Accept



Setup Start



Revision ID:

Item Name: Dual Cargo Mirror Assy

Stop



Start Date: 17/03/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 22/03/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

M

Date: 10-3-17

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3074

A2 U/R

100

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

- 1- punch one side
- 2- slide parts in tube
- 3- punch other side
- 4- bend as per dwg D3074
- 5- drill holes as per dwg D3074
- 6- deburr and polish

> m-h 10/04/12

4X

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 w/4/13

xy

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57029

March 17, 2010 1:12:23 PM



Page 2

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120



Small Fab

Small Fab

Small Fab

Memo

Assemble as per dwg D3074

0.00

0.00

= 7 m. d 10/04/13

(4X)

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8 10/04/13

(x4)

140



Packaging

Packaging

Identify as per dwg & Stock Location:

PRN

Memo

57030

0.00

0.00

10/04/20 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

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Start Date: 17/03/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 22/03/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/20 *[Signature]*

MF
10-4-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 17, 2010 1:12:28 PM

Page 1

Work Order ID: 57029

Parent Item: D119-696-043

Parent Item Name: Dual Cargo Mirror Assy






Comments: IPP Rev:A□08-02-19□New issue □DD verified by: LL

Start Date: 17/03/2010

Required Date: 22/03/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD10  Washer D2011-101  6" Mirror		Purchased	No				Each	0.0000	24.0000			
NAS1149003635 M113288										24X		
		Manufactured	No				Each	8.0000	8.0000			m-l 10/03/31
												

D2054



Bushing

Manufactured No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST228

.8

53992

1

56795 ✓

7

Each

23.0000

8.0000



8X m-l 10/03/31

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST005

23

53179

4

56291 ✓

19

Each

13.0000

8.0000



8X m-l 10/03/31

D2055



Clamp

Manufactured No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST005

13

55726 ✓

13

8X m-l 10/03/31

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

March 17, 2010 1:12:28 PM

Work Order ID: 57029

Parent Item: D119-696-043

Parent Item Name: Dual Cargo Mirror Assy

Comments: IPP Rev:A008-02-190New issue 0DD verified by: LL

Start Date: 17/03/2010

Required Date: 22/03/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2056		Manufactured	No				Each	8.0000	4.0000			
-------	--	--------------	----	--	--	--	------	--------	--------	--	--	--



Bell Crank

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST006

8

55598

2

56302 ✓

6

D3072-1		Manufactured	No				Each	5.0000	4.0000			
---------	--	--------------	----	--	--	--	------	--------	--------	--	--	--



Bracket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST035

5

53119 ✓

5

D3072-2		Manufactured	No				Each	3.0000	4.0000			
---------	--	--------------	----	--	--	--	------	--------	--------	--	--	--



Bracket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST035

3

53120 ✓

3

B 57253

10/03/31

4X m-h

10/03/31

4X m-h

3X m-h 10/03/31

1X m-h 10/04/09

March 17, 2010 1:12:28 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 17, 2010 1:12:28 PM

Page 3

Work Order ID: 57029



Parent Item: D119-696-043



Parent Item Name: Dual Cargo Mirror Assy

Start Date: 17/03/2010

Required Date: 22/03/2010

Comments: IPP Rev:A008-02-19 New issue DD verified by: LL

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304TR0.500W.049 304 RD Tube .500 x .049W		Purchased	No				f	78.0447	14.6947			

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

MAT017

78.0447395

111814

18.0447395

114045 ✓

60

Each

2,228.000

12.0000

MS21042L3

Purchased

No



Nut

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST300

2228

110844

35

111274

27

111668

58

112314

285

112385

103

113523

20

113537 ✓

700

113644

1000

mid
14.6947 10/03/30

12x *m-l* 10/03/31

March 17, 2010 1:12:28 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 17, 2010 1:12:28 PM

Page 4

Work Order ID: 57029



Parent Item: D119-696-043



Parent Item Name: Dual Cargo Mirror Assy

Start Date: 17/03/2010

Required Date: 22/03/2010

Comments: IPP Rev:A 08-02-19 New issue DD verified by: LL

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039-1-18 Screw		Purchased	No				Each	108.0000	12.0000			

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST292

108

110916

8

113845 ✓

100

m-h
10/03/31

March 17, 2010 1:12:28 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

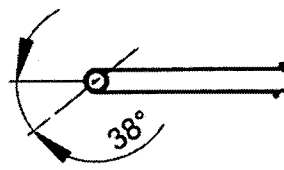
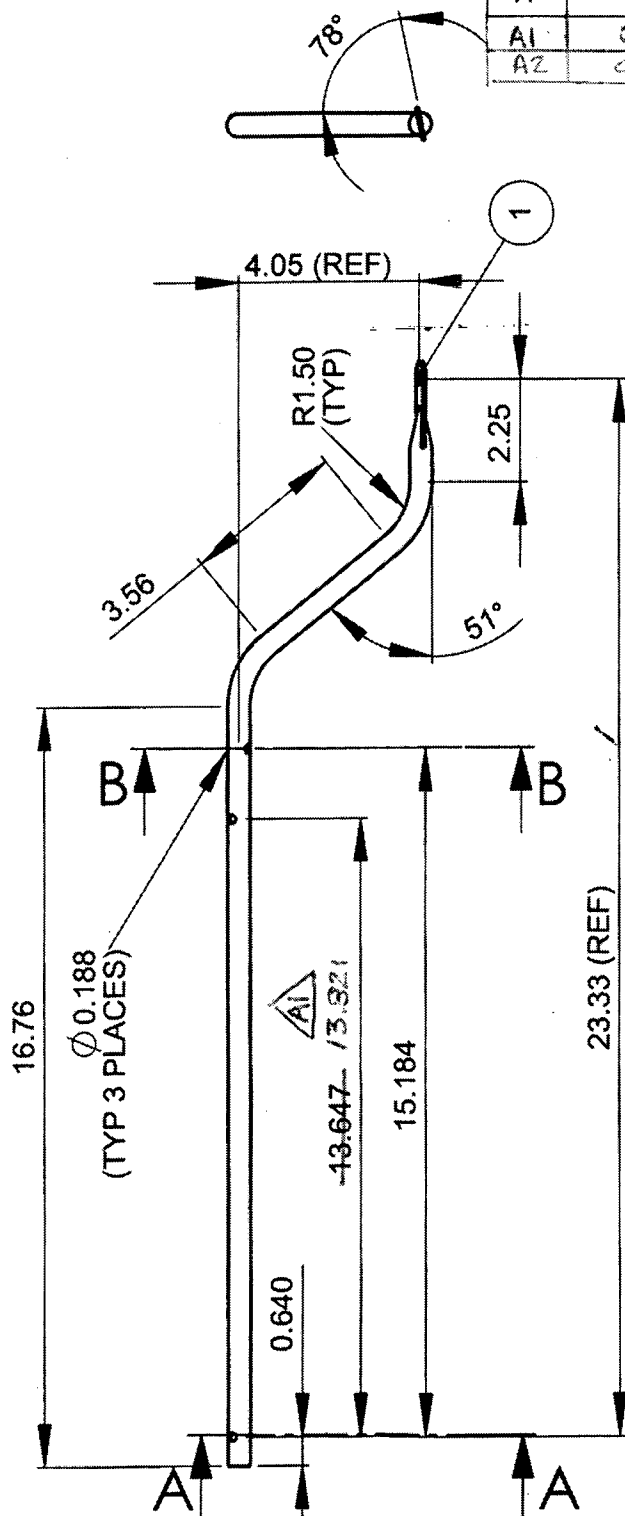
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

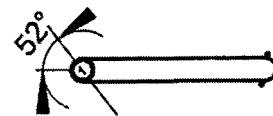
**DART**

DESIGN	<i>CP</i>	DRAWN BY	<i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>#</i>	APPROVED	<i>#</i>	DRAWING NO. D3074
DATE	01.12.17	TITLE	ARM	REV. A SHEET 1 OF 2
A	01.12.17	NEW ISSUE		SCALE 1:4
AI	02.01.15	13.821 WAS 13.647	<i>CP</i>	
AZ	02.03.22	ADD FINISH	<i>CP</i>	

change
UNDER REVIEW
on
cp
03.06.2018
CHANGE TO 0.049"
WALL THICKNESS



SECTION B-B
(1 PLACE)



SECTION A-A
(TYP 2 PLACES)

RELEASED
02.01.15

D3074-1

- 1) PUNCH END PER SPEC CONTROL DRAWING D2727
- 2) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE, Ø 0.50 x 0.049" WALL
ENSURE SEAMLESS TUBING IS USED
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) FINISH: POWDER COAT BLACK SHINJTEX (4.3.5.7) PER DART QSI 005 4.3 /AZ

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

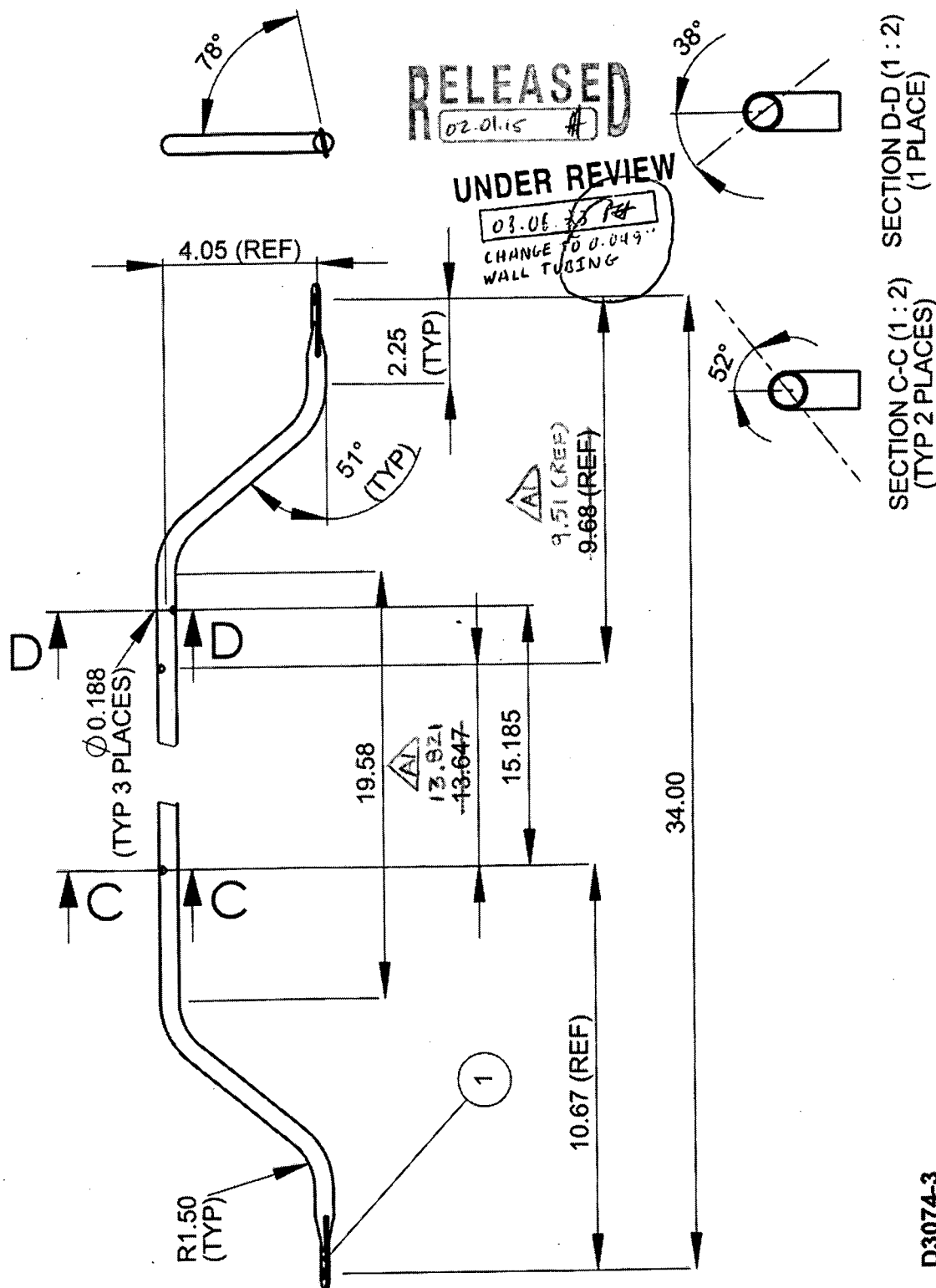
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3074	REV. A SHEET 2 OF 2
DATE 01.12.17	TITLE ARM		SCALE 1:4



D3074-3

- 1) PUNCH ENDS PER SPEC CONTROL DRAWING D2727
- 2) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE, ϕ 0.50 x 0.035 WALL
ENSURE SEAMLESS TUBING IS USED
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS NOT SYMMETRIC

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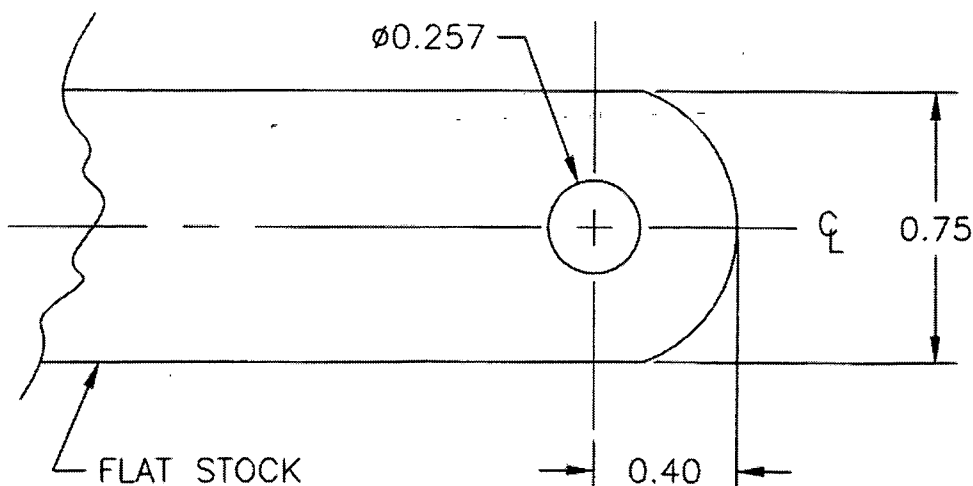
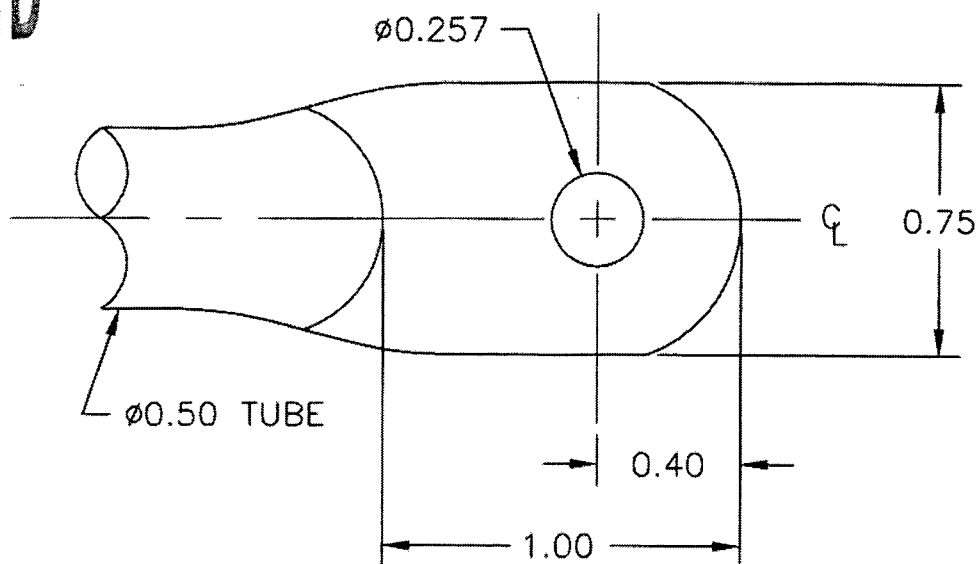


DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2727	REV. A SHEET 1 OF 1
DATE 97.11.24		TITLE PUNCH DT8012 SPEC CONTROL	SCALE 2:1
A	97.11.24	NEW ISSUE	
A1	#1P 01.12.20	ADD TOLERANCE NOTE	

B57029
m-h 12/03/31

SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED
98/03/06 KE



NOTE: TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

B57029
m-l w/03/21

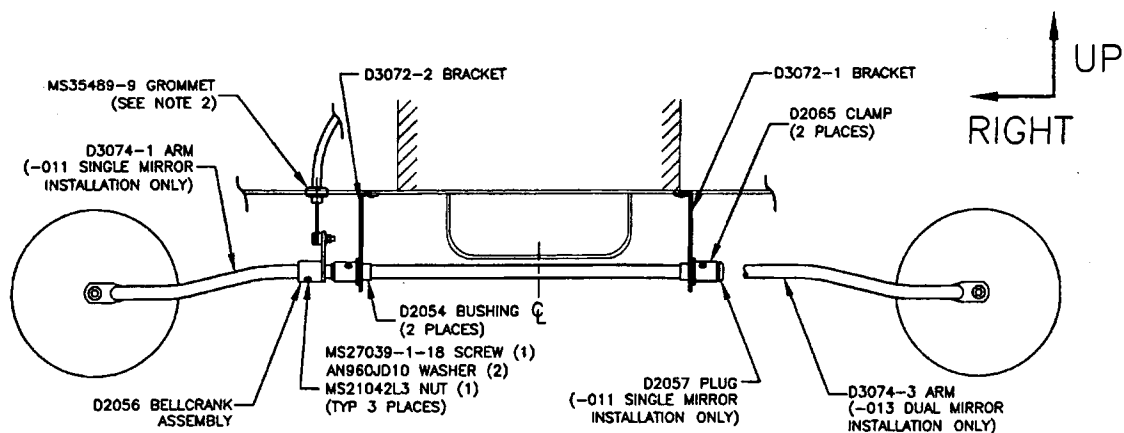


Figure 25-2 – View A: Looking Aft
(D119-696-011/-013 Mirror Shown)

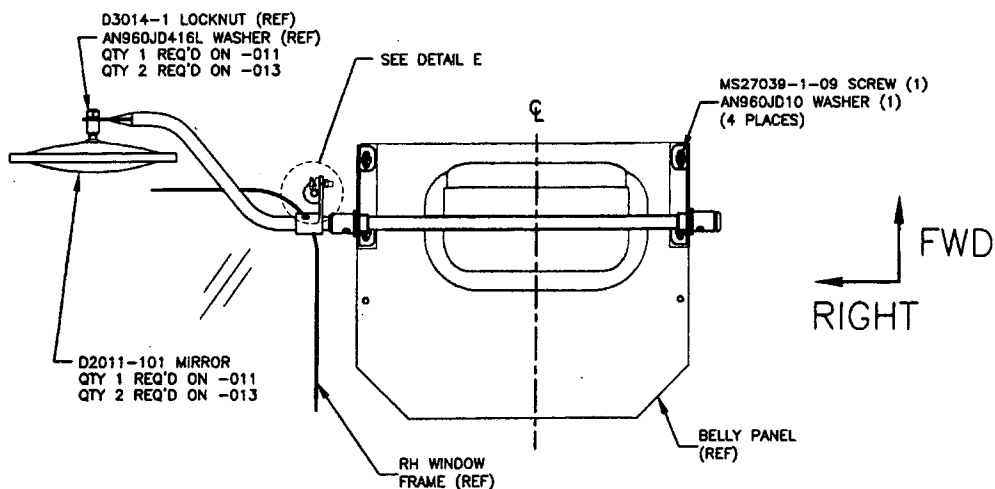


Figure 25-3 – View B: Looking Up
(D119-696-011 Mirror Shown, -013 similar)

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25-00-00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

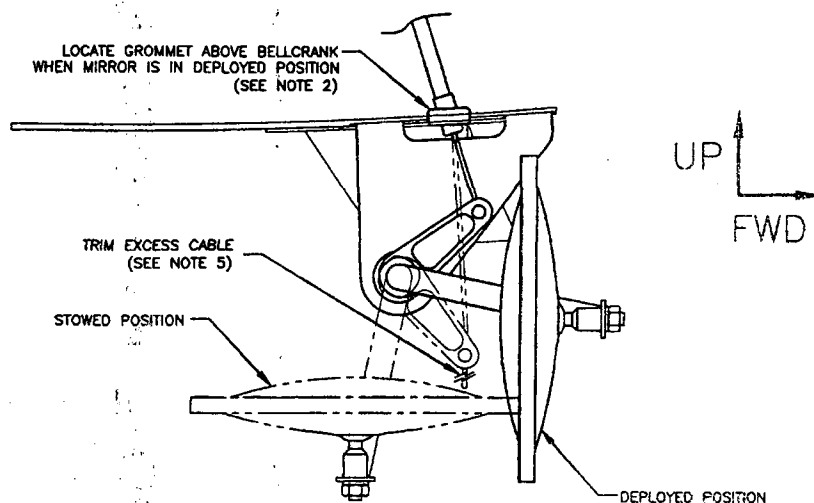


Figure 25-4 – Detail C: Side View of Mirror Deployment
(D119-696-011/-013 Mirror Shown)

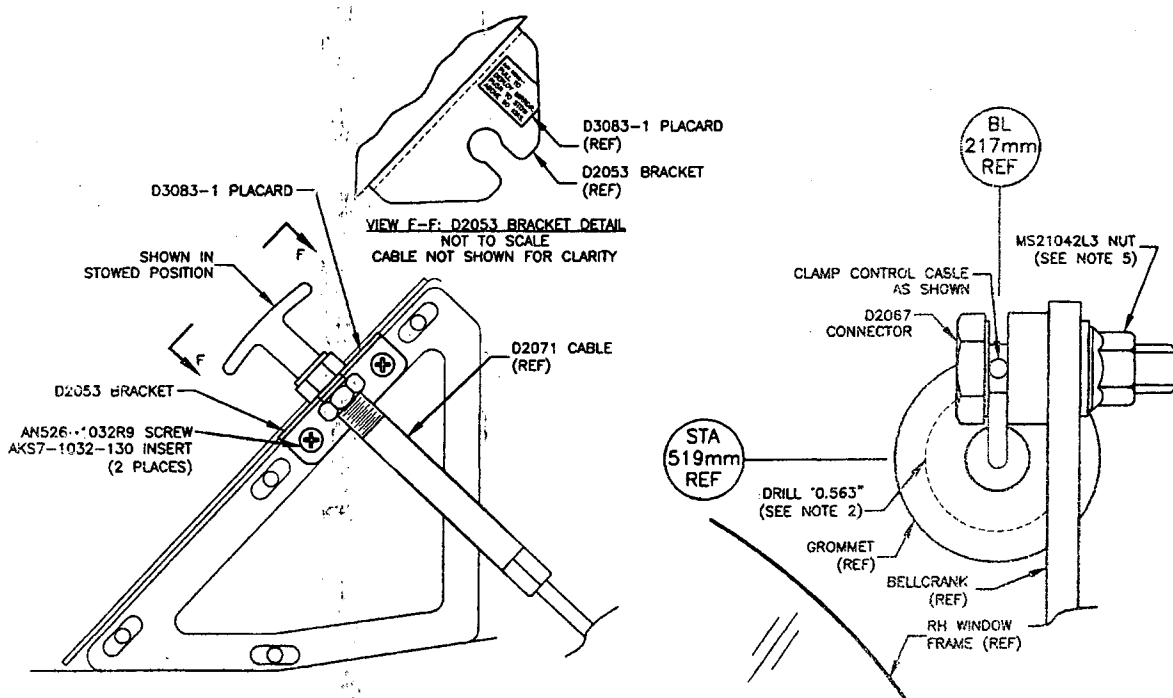


Figure 25-5 – Detail D
Control Panel Attachment
(D119-696-011/-013 Mirror Shown)

Figure 25-6 – Detail E
Bellcrank/Cable Attachment
(D119-696-011/-013 Mirror Shown)

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25-00-00

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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